

[Cited Reference 3]

(TRANSLATION)

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(Kokai) No. Hei. 5 - 178080

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Application No. Hei. 4 - 18578

Application Date: January 7, 1992

Inventor: Toshio Harada (phonetic)

Applicant: K.K. Zexsel (phonetic)

Title of Invention: An air - conditioning apparatus equipped with a ventilation and air cleaning functions

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What Is Claimed:

[Claim 1] An air - conditioning apparatus for use in a vehicle equipped with a ventilation and air cleaning functions provided with an inner air take - in inlet for taking in air into a vehicle, a temperature control means for controlling the temperature of the introduced air and feeding the same into the vehicle, characterized by having

a first flow passage for guiding the introduced air directly to said temperature control means;

a second flow passage for guiding the introduced air to said temperature control means after having cleaned the introduced air;

a first flow passage for guiding the introduced air directly to said temperature control means;

a first flow passage for guiding the introduced air directly to said temperature control means;

a third flow passage for exhausting the introduced air out of the vehicle; and  
a damper means for selectively guiding all or a part of the air taken in from said  
inner air take - in inlet to said first, second and third flow passage.

Detailed Explanation of the Invention:

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[0008] In Figure 1, the outer air take - in inlet 1 and the inner air take - in inlet 3  
are selectively guided to the entrance of the blower fan 7 by means of the in - take  
damper 5. The outlet of the blower fan 7 is connected with the main flow passage 9.

[0009] This main flow passage 9 is divided into a first sub - flow passage 11 and a  
second sub - flow passage 13 in the upper stream section. A first damper 15 is  
provided in the entrance of the first sub - stream passage 11 and the second damper  
17 is provided in the entrance of the second sub - stream passage 13 respectively.  
The entrances of these sub - stream passages 11 and 13 are associated also with the  
outer air take - in inlet 1 via a side passage 19. By means of the first and second  
dampers 15 and 17, the openings and closings of the entrances of the first and  
second sub - stream passages 11 and 13 and the openings and closings of the side  
passage 19 can be carried out.

[0010] A air cleaning unit 21 is mounted in the second sub - flow passage 13. This  
air cleaning unit 21 contains a ceramic ozonizer 23 which generates ozone for  
removing smell and pasteurization, an electric dust - collecting device 25 and a  
honeycomb - like ozone decomposing catalyst 27.

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Partial English translation of page 4:

[Explanation of the Codes]

3 inner air take - in inlet

5 in - take damper

7 blower fan

9 main flow passage

11 first sub - flow passage

13 second sub - flow passage

15 first dumper

17 second dumper

19 side passage

21 air cleaning unit

29 evaporator

31 heater core

33 mix door

47 gas sensor

49 temperature sensor

51 moisture sensor

53 control circuit

